



JC10 Rec'd PCT/PTO 26 APR 2005

PC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | | |
|-----------------------------|---|------------------------|
| In re Application of: |) | Art Unit: |
| PEDERSEN, et al. |) | Examiner: |
| Serial No.: 10/507,121 |) | Washington, D.C. |
| Filed: March 17, 2005 |) | April 26, 2005 |
| For: AN IMPROVED METHOD FOR |) | Docket No.: PEDERSEN=9 |
| SYNTHESISING TEMPLATED |) | Confirmation No.: 8893 |
| MOLECULES |) | |

INFORMATION DISCLOSURE STATEMENT [IDS]

U.S. Patent and Trademark Office
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

S i r :

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. 1.97, 1.98, and it is requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other application relying on the filing date of the above-identified application or cross-referencing it as a related application.

1. This IDS should be considered, in accordance with 37 C.F.R. 1.97, as it is filed:

☒ A. within three months of the filing date of the above-identified national application or within three months of the entry into the national stage of the above-identified international application. See 37 CFR 1.97(b)(1) and (3).

☐ B. before the mailing date of a first office action on the merits. See 37 CFR 1.97(b).

☐ C. after (A) and (B) above, but before final rejection or allowance, and Applicants have made the necessary certification (box "i" below) or paid the necessary fee (box "ii" below). See 37 CFR 1.97(c)(2).

☐ i. Counsel certifies that, upon information and

belief, each item of information listed herein was either (a) cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS or (b) was not cited in a communication from a foreign patent office in a counterpart foreign application and was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.

- [] ii. Credit Card Payment Form, PTO-2038, authorizing payment for the fee set forth in 1.17(p), presently believed to be \$180, is attached.

[] D. after (A), (B) and (C) above, but before payment of the issue fee. Applicant petitions under 37 C.F.R. 1.97(d) for consideration of this IDS. A Credit Card Payment Form, PTO-2038, authorizing payment for the fee set forth in 1.17(p)(1), presently believed to be \$180 is attached. Counsel certifies that, upon information and belief, each item of information listed herein was either (i) cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS or (ii) was not cited in a communication from a foreign patent office in a counterpart foreign application and was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.

[] E. As a submission in accordance with the transitional procedure for limited examination after final rejection pursuant to 37 CFR §1.129(a). Pursuant to MPEP §706.07(g), page 700-66, col. 2 (August 2001), this IDS is treated as if filed with a period set forth in 37 CFR §1.97(b) and considered without the petition and petition fee required by 1.97(d).

[] F. As a submission with or after a request for continued examination under CFR §1.114, and before the mailing of a first office action on the RCE. See 37 CFR §1.97(b)(4).

2. In accordance with 37 C.F.R. 1.98, this IDS includes a

list (e.g., form PTO-1449) of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment hereto. A copy of each document is attached, except as explained below.

[] While an IDS filed under §1.97 must contain a "list of all patents, publications or other information submitted for consideration by the Office", see §1.98(a) (1), the only requirement for the list is that it provide the information set forth in §1.98(b). There is no requirement that a form PTO-1449 be used (MPEP §609 merely says that use of this form is "encouraged"). Counsel has used a list provided to him by Applicants, and not transferred the information to a PTO-1449, to avoid the risk of any inadvertent error in transferring the information.

[X] A. Documents FN-GQ are U.S. Patents or U.S. Patent Publications, and hence copies of these documents have not been provided. See 37 CFR 1.98(a)(2)(ii).

[] B. Documents _____ are deemed substantially cumulative to documents _____, and, in accordance with 1.98(c), only a copy of each of the latter documents is enclosed.

[X] C. Documents 1-53, AA-AM, BA-DO, EA-FM, GS-GV, GZ-HZ, HE-HF, HI, IB-IF, IH-IN, JN, JP-JQ, JS-JZ, KB-KE, and KJ-KT were all previously cited by or submitted to the Office in the following prior application(s), which are relied upon under 35 U.S.C. 120:

10/175,539, filed June 30, 2002.

Applicants identify these documents by attaching hereto copies of the form PTO-892s and PTO-1449s from the files of the prior applications or a fresh PTO-1449 listing these documents, and request that they be considered and made of record in accordance with 1.98(d). Per 37 CFR 1.98(d), copies of these documents need not be filed in this application. If copies of any of these documents cannot be found in the files of the prior applications, the Examiner is requested to so notify counsel before taking action in this case, so replacement copies can be submitted.

While an IDS filed under §1.97 must contain a "list of all patents, publications or other information submitted for consideration by the Office", see §1.98(a) (1), the only requirement for the list is that it provide the information set forth in §1.98(b). There is no requirement that a form PTO-1449 be used (MPEP §609 merely says that use of this form is "encouraged") and no prohibition on submitting a copy of a form PTO-1449 or form PTO-892 from a prior case. Indeed, the re-use of such forms is desirable as it avoids error in transferring the information, and evidences that the reference was considered in a prior application. A previously accepted PTO-1449, or an examiner-prepared PTO-892, necessarily complies with §1.98(b).

[X] 3. Document HJ is not in the English language. In accordance with 1.98(a) (3), Applicants state:

[] documents _____ already contain an English language abstract, summary or claim set.

[X] a publicly available abstract is attached to document HJ, and the source of the abstract is indicated thereon.

[] documents ____ are patents or published patent applications for which counterpart English language patents or patent applications exist, and are enclosed, as follows:

| <u>Foreign Lang. Doc.#</u> | <u>English Lang. Doc.#</u> |
|----------------------------|----------------------------|
| [insert] | [insert] |

[] applicants have prepared an English translation of at least the pertinent portions of documents _____, and copies are attached.

[] A concise explanation of the relevance of documents _____ is found in the attached search report from the _____ Patent Office (see reply to Comment 68 in the preamble to the final rules; 1135 OG 13 at 20).

[] A concise explanation of the relevance of documents _____ appears in the present specification.

[] A concise explanation of the relevance of documents _____

_____ is set forth as follows:

[Insert concise explanation of relevance]

4. No explanation of relevance is necessary for documents in the English language (see reply to Comments 67 and 68 in the preamble to the final rules; 1135 OG 13 at 20).

5. If the month of publication of a nonpatent reference is not stated, it is because it is not apparent from review of the reference. If requested to do so by the Examiner, Applicants will attempt to locate and write to the publisher.

If the publication date of a cited document is set forth only as a publication year, and that year is prior to the year of filing or, if priority is claimed, year of priority of this application, then the particular month of publication is not in issue. Likewise if that publication year is after the year of filing of this application, the month of publication is not in issue.

If the date of publication of a nonpatent reference is stated, then, except as explained below, it is the nominal date stated in the reference, or in a larger document (journal or book) from which the reference was extracted. Applicants reserve the right to challenge this date by contacting the publisher to determine the actual shipment date, or by contacting recipients to determine the receipt dates.

6. Other information being provided for the examiner's consideration follows:

[insert other information]

7. In accordance with 37 C.F.R. 1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in §1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless otherwise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant reserves the right to prove that the date of publication is in fact different.

USSN - 10/507,121

8. The Commissioner is hereby authorized and requested to charge any additional fees which may be required in connection with this paper or credit any overpayment to Deposit Account No. 02-4035.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.
Attorneys for Applicant

By: 

Iver P. Cooper
Reg. No. 28,005

624 Ninth Street, N.W.
Washington, D.C. 20001
Telephone: (202) 628-5197
Facsimile: (202) 737-3528
IPC:lms
G:\ipc\g-i\hoib\PEDERSEN9\pto ids.wpd

| | | |
|---|---|------------------------------|
| FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT LIST DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary) | ATTY DOCKET NO: PEDERSEN=9 | SERIAL NO: 10/507,121 |
| | APPLICANT: Henrik PEDERSEN et al | |
| | FILING DATE: March 17, 2005 | CONFIRMATION NO: 8893 |

| U.S. PATENT DOCUMENTS (include at least patentee, patent number and issue date) | | | | | | | | | | | | | |
|---|----|-----------------|----|----|----|---|---|---|------------------|---------------------------|-------|---------------|---------------------------|
| EXAMINER INITIAL | | DOCUMENT NUMBER | | | | | | | DATE | PATENTEE | CLASS | SUB- CLASS | FILING DATE IF APPROP. |
| | FN | 6 | 4 | 2 | 9 | 3 | 0 | 0 | Aug 6, 2002 | Kurz, M et al. | | | |
| | FO | 6 | 2 | 0 | 7 | 4 | 4 | 6 | Mar 27, 2001 | Szostak, J et al. | | | |
| | FP | 6 | 1 | 4 | 3 | 5 | 0 | 3 | Nov 7, 2000 | Baskerville, DS et al. | | | |
| | FQ | 6 | 6 | 2 | 0 | 5 | 8 | 7 | Sept 16, 2002 | Taussig, MJ et al. | | | May 28, 1998 |
| | FR | 20 | 03 | 00 | 04 | 1 | 2 | 2 | Jan 2, 2003 | Beigelman et al. | | | April 4, 2001 |
| | FS | 6 | 5 | 9 | 3 | 0 | 8 | 8 | Jul 15, 2003 | Saito, I et al. | | | Aug 24, 2000 |
| | FT | 5 | 5 | 7 | 1 | 9 | 0 | 3 | Nov 5, 1991 | Gryaznov,SM et al. | | | |
| | FU | 5 | 4 | 7 | 6 | 9 | 3 | 0 | Dec 19, 1995 | Letsinger, RL et al. | | | |
| | FV | 5 | 6 | 8 | 1 | 9 | 4 | 3 | Oct 28, 1997 | Letsinger, RL et al. | | | |
| | FW | 5 | 7 | 8 | 0 | 6 | 1 | 3 | Jul 14, 1998 | Letsinger, RL et al. | | | |
| | FX | 5 | 7 | 4 | 1 | 6 | 4 | 3 | Apr 21, 1998 | Gryaznov, SM et al. | | | |
| | FY | 5 | 8 | 3 | 0 | 6 | 5 | 8 | Nov 3, 1998 | Gryaznov, SM et al. | | | |
| | FZ | 5 | 8 | 4 | 3 | 6 | 5 | 0 | Dec 1, 1998 | Segev, D | | | |
| | GA | 5 | 5 | 0 | 3 | 8 | 0 | 5 | Apr 2, 1993 | Sugarman et al. | | | |
| | GB | 5 | 6 | 3 | 9 | 6 | 0 | 3 | Jun 17, 1997 | Dower et al. | | | |
| | GC | 5 | 6 | 6 | 5 | 9 | 7 | 5 | Sep 9, 1997 | Kedar et al. | | | |
| | GD | 5 | 7 | 0 | 8 | 1 | 5 | 3 | Jan 13, 1998 | Dower et al. | | | |
| | GE | 5 | 7 | 7 | 0 | 3 | 5 | 8 | Jun 23, 1998 | Dower et al. | | | |
| | GF | 5 | 7 | 8 | 9 | 1 | 6 | 2 | Aug 4, 1998 | Dower et al. | | | |
| | GG | 6 | 0 | 5 | 6 | 9 | 2 | 6 | May 2, 2000 | Sugarman et al. | | | July 23, 1996 |
| | GH | 6 | 1 | 4 | 0 | 4 | 9 | 3 | Oct 31, 2000 | Dower et al. | | | Sept 11, 1998 |
| | GI | 6 | 1 | 4 | 3 | 4 | 9 | 7 | Nov 2, 2000 | Dower et al. | | | Mar 6, 1998 |
| | GJ | 6 | 1 | 6 | 5 | 7 | 1 | 7 | Dec 26, 2000 | Dower et al. | | | May 13, 1998 |
| | GK | 6 | 1 | 6 | 5 | 7 | 7 | 8 | Dec 26, 2000 | Kedar et al. | | | Jul 2, 1998 |
| | GL | 6 | 4 | 1 | 6 | 9 | 4 | 9 | July 9, 2002 | Dower et al. | | | Feb 24, 1999 |
| | GM | 5 | 5 | 7 | 3 | 9 | 0 | 5 | Nov. 12,1996 | Lerner, RL et al. | | | |
| | GN | 5 | 7 | 2 | 3 | 5 | 9 | 8 | Mar 3, 1998 | Lerner, RL et al. | | | |
| | GO | 6 | 0 | 6 | 0 | 5 | 9 | 6 | May 9, 2000 | Lerner, R et al. | | | Mar 3, 1998 |
| | GP | 4 | 8 | 2 | 2 | 7 | 3 | 1 | April 18, 1989 | Watson et al. | | | |
| | GQ | 5 | 7 | 6 | 3 | 2 | 6 | 3 | 9 Jun 1998 | Dehlinger, PJ | | | |

| | |
|--|-----------------|
| EXAMINER | DATE CONSIDERED |
| EXAMINER: Initial if reference considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | |

| | | |
|--|---|------------------------------|
| FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT LIST DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary) | ATTY DOCKET NO: PEDERSEN=9 | SERIAL NO: 10/507,121 |
| | APPLICANT: Henrik PEDERSEN et al | |
| | FILING DATE: March 17, 2005 | CONFIRMATION NO: 8893 |

| FOREIGN PATENT DOCUMENTS (include at least document number, publication date and country) | | | | | | | | | | | | | |
|---|----|-----------------|----|----|---|---|---|---|-----------------|---------|-------|-----------|--------------------|
| | | DOCUMENT NUMBER | | | | | | | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION YES/NO |
| | GR | 9 | 3 | 0 | 3 | 1 | 7 | 2 | 18 Feb 1991 | PCT | | | |
| | GS | 9 | 8 | 3 | 1 | 7 | 0 | 0 | 23 July 1998 | PCT | | | |
| | GT | 0 | 0 | 3 | 2 | 8 | 2 | 3 | 8 June 2000 | PCT | | | |
| | GU | 0 | 0 | 4 | 7 | 7 | 7 | 5 | 17 Aug 2000 | PCT | | | |
| | GV | 9 | 0 | 0 | 5 | 7 | 8 | 5 | 31 May 1990 | PCT | | | |
| | GW | 0 | 3 | 2 | 4 | 6 | 1 | 6 | 19 July 1989 | EP | | | |
| | GX | 9 | 6 | 3 | 5 | 6 | 9 | 9 | 14 Nov 1996 | PCT | | | |
| | GY | 0 | 6 | 9 | 5 | 3 | 0 | 5 | 27 October 1994 | EP | | | |
| | GZ | 0 | 6 | 0 | 4 | 5 | 5 | 2 | 1 April 1993 | EP | | | |
| | HA | 9 | 5 | 1 | 2 | 6 | 0 | 8 | 11 May 1995 | PCT | | | |
| | HB | 0 | 7 | 7 | 3 | 2 | 2 | 7 | 14 May 1997 | EP | | | |
| | HC | 0 | 7 | 7 | 6 | 3 | 3 | 0 | 4 Oct 1996 | EP | | | |
| | HD | 0 | 6 | 4 | 3 | 7 | 7 | 8 | 14 Oct. 1993 | EP | | | |
| | HE | 0 | 0 | 2 | 3 | 4 | 5 | 8 | 27 April 2000 | PCT | | | |
| | HF | 20 | 04 | 01 | 6 | 7 | 6 | 7 | 26 Feb 2004 | PCT | | | |
| | HG | 0 | 1 | 0 | 0 | 8 | 7 | 6 | 4 Jan. 2001 | PCT | | | |
| | HI | 9 | 6 | 1 | 2 | 0 | 1 | 4 | 25 April 1996 | PCT | | | |
| | HJ | 19 | 6 | 4 | 2 | 7 | 5 | 1 | 23 April 1998 | DE | | | Eng. Abstract |
| | HK | 9 | 7 | 3 | 5 | 1 | 9 | 8 | 25 Sept. 1997 | PCT | | | |
| | HL | 02 | 1 | 0 | 3 | 0 | 0 | 8 | 27 Dec 2002 | PCT | | | |
| | HM | 02 | 1 | 0 | 2 | 8 | 2 | 0 | 27 Dec 2002 | PCT | | | |
| | HN | 20 | 04 | 01 | 3 | 0 | 7 | 0 | 12 Feb 2004 | PCT | | | |
| | HO | 20 | 04 | 11 | 0 | 9 | 6 | 4 | 23 12 2004 | PCT | | | |
| | HP | 20 | 04 | 02 | 4 | 9 | 2 | 9 | 25 March 2004 | PCT | | | |
| | HQ | 20 | 04 | 05 | 6 | 9 | 9 | 4 | 8 July 2004 | PCT | | | |
| | HR | 03 | 0 | 7 | 8 | 4 | 4 | 5 | 25 Sept. 2003 | PCT | | | |
| | HS | 03 | 0 | 7 | 8 | 6 | 2 | 6 | 25 Sept 2003 | PCT | | | |
| | HT | 03 | 0 | 7 | 8 | 0 | 5 | 0 | 25 Sept 2003 | PCT | | | |
| | HU | 03 | 0 | 7 | 8 | 4 | 4 | 6 | 25 Sept 2003 | PCT | | | |
| | HV | 03 | 0 | 7 | 8 | 6 | 2 | 7 | 25 Sept 2003 | PCT | | | |
| | HW | 20 | 04 | 07 | 4 | 5 | 0 | 1 | 2 Sept 2004 | PCT | | | |
| | HX | 20 | 04 | 07 | 4 | 4 | 2 | 9 | 2 Sept 2004 | PCT | | | |
| | HY | 20 | 04 | 08 | 3 | 4 | 2 | 7 | 30 Sept 2004 | PCT | | | |
| | HZ | 20 | 04 | 03 | 9 | 8 | 2 | 5 | 13 May 2004 | PCT | | | |
| | IA | 20 | 04 | 00 | 1 | 0 | 4 | 2 | 31.12.2003 | PCT | | | |
| | IB | 20 | 05 | 0 | 3 | 7 | 7 | 8 | 13 Jan 2004 | PCT | | | |

| | |
|--|------------------------|
| EXAMINER | DATE CONSIDERED |
| EXAMINER: Initial if reference considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | |

| | | |
|---|---|------------------------------|
| FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT LIST DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary) | ATTY DOCKET NO: PEDERSEN=9 | SERIAL NO: 10/507,121 |
| | APPLICANT: Henrik PEDERSEN et al | |
| | FILING DATE: March 17, 2005 | CONFIRMATION NO: 8893 |

| OTHER DOCUMENTS (include author, title, name of publication, volume, pages & date of publication) | | |
|---|--|--|
| IC | Nemoto, N et al. "In vitro virus: bonding of mRNA bearing puromycin at the 3'-terminal end to the C-terminal end of its encoded protein on the ribosome in vitro". FEBS Lett. 1997 Sep 8;414(2):405-8. | |
| ID | Roberts, RW et al. "RNA-peptide fusions for the in vitro selection of peptides and proteins". Proc Natl Acad Sci U S A. 1997 Nov 11;94(23):12297-302. | |
| IE | Kurz, M et al. "An efficient synthetic strategy for the preparation of nucleic acid-encoded peptide and protein libraries for in vitro evolution protocols" Fourth International Electronic Conference on Synthetic Organic Chemistry (ECSOC-4), www.mdpi.org/ecsoc-4.htm , September 1-30, 2000 | |
| IF | Kurz, M et al. "Psoralen photo-crosslinked mRNA-puromycin conjugates: a novel template for the rapid and facile preparation of mRNA-protein fusions. Nucleic Acids Res. 2000 Sep 15;28(18):E83. | |
| IG | Keiler et al. "Role of a peptide tagging system in degradation of proteins synthesized from damaged messenger RNA". Science. 1996 Feb 16;271(5251):990-3. | |
| IH | Benner, SA. "Expanding the genetic lexicon: incorporating non-standard amino acids into proteins by ribosome-based synthesis". Trends Biotechnol. 1994 May;12(5):158-63 | |
| II | Mendel, D." Site-directed mutagenesis with an expanded genetic code". Annu. Rev. Biophys. Biomol. Struc. 1995. 24:463-93 | |
| IJ | Liu DR et al. "Engineering a tRNA and aminoacyl-tRNA synthetase for the site-specific incorporation of unnatural amino acids into proteins in vivo". Proc Natl Acad Sci U S A. 1997 Sep 16;94(19):10092-7. | |
| IK | Liu DR et al. "Progress toward the evolution of an organism with an expanded genetic code". Proc Natl Acad Sci USA. 1999 Apr 27;96(9):4780-5 | |
| IL | Liu, R et al. "Optimized synthesis of RNA-protein fusions for in vitro protein selection". Methods Enzymol. 2000;318:268-93. | |
| IM | Wang, L et al. "A new functional suppressor tRNA/aminoacyl-tRNA synthetase pair for the in vivo incorporation of unnatural amino acids into proteins" J. Am. Chem. Soc 2000, 122, 5010-5011 Pub 5 April 2000 | |
| IN | Ellman J.A., et al. " Biosynthetic method for introducing Unnatural Amino acids site specifically into proteins". Methods Enzymol. 202, 301-336 (1992) | |
| IO | José Salas et al. "Biosynthetic Polydeoxynucleotides as Direct Templates for Polypeptide Synthesis". J. of Biological Chemistry, vol.243, No. 6, 1968, p. 1012-1015 | |
| IP | Walder JA, Walder RY, Heller MJ, Freier SM, Letsinger RL, Klotz IM. "Complementary carrier peptide synthesis: general strategy and implications for prebiotic origin of peptide synthesis". Proc Natl Acad Sci U S A. 1979 Jan;76(1):51-5. | |
| IQ | Bruick et al. "Template-directed ligation of peptides to oligonucleotides" Chemistry and Biology, vol. 3, No. 1, January 1996, p.49-56; | |
| IR | Tamura K, Schimmel P. "Oligonucleotide-directed peptide synthesis in a ribosome- and ribozyme-free system". Proc Natl Acad Sci U S A. 2001 Feb 13;98(4):1393-7. | |
| IS | Lewis RJ, Hanawalt PC. "Ligation of oligonucleotides by pyrimidine dimers—a missing 'link' in the origin of life?" 22;298(5872):393-6. | |
| IT | Liu J, Taylor JS. "Template-directed photoligation of oligodeoxyribonucleotides via 4-thiothymidine". Nucleic Acids Res. 1998 Jul 1;26(13):3300-4 | |
| IU | Fujimoto et al. "Template-directed photoreversible ligation of deoxyoligonucleotides via 5-Vinyldeoxyuridine" J. Am. Soc. 2000, 122, 5646-5647 | |
| IV | Kenzo Fujimoto, Shigeo Matsuda, Naoki Ogawa, Masayuki Hayashi & Isao Saito "Template-directed reversible photocircularization of DNA via 5-vinyldeoxycytidine". TETRAHEDRON LETTERS 2000 , 41:33:6451-6454 | |

| | |
|---|------------------------|
| EXAMINER | DATE CONSIDERED |
| EXAMINER: Initial if reference considered. Draw line through citation if not in conformance <u>and</u> not considered. Include copy of this form with next communication to applicant. | |

| | | |
|---|---|------------------------------|
| FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT LIST DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary) | ATTY DOCKET NO: PEDERSEN=9 | SERIAL NO: 10/507,121 |
| | APPLICANT: Henrik PEDERSEN et al | |
| | FILING DATE: March 17, 2005 | CONFIRMATION NO: 8893 |

| | |
|----|---|
| IW | Kenzo Fujimoto, Naoki Ogawa, Masayuki Hayashi, Shigeo Matsuda & Isao Saito "Template directed photochemical synthesis of branched oligodeoxynucleotides via 5-carboxyvinyldoxyuridine". Tetrahedron letters 2000, 41:49:9437-40 |
| IX | Letsinger et al. "Chemical Ligation of oligonucleotides in the presence and absence of a template". J. Amer. Chem. Soc. 1993, 115, 3808-9 |
| IY | Gryaznov SM, Letsinger RL. "Template controlled coupling and recombination of oligonucleotide blocks containing thiophosphoryl groups". Nucleic Acids Res. 1993 Mar 25;21(6):1403-8 |
| IZ | Gryaznov SM, Schultz R, Chaturvedi SK, Letsinger RL. "Enhancement of selectivity in recognition of nucleic acids via chemical autoligation". Nucleic Acids Res. 1994 Jun 25;22(12):2366-9. |
| JA | Herrlein MK, Letsinger RL. "Selective chemical autoligation on a double-stranded DNA template". Nucleic Acids Res. 1994 Nov 25;22(23):5076-8 |
| JB | Letsinger, RL; Wu, T; Elghanian, R "Chemical and photochemical ligation of oligonucleotide blocks". Nucleosides and nucleotides, 16(5&6), 643-652 (1997) |
| JC | Visscher J, Bakker CG, van der Woerd R, Schwartz AW "Template-directed oligomerization catalyzed by a polynucleotide analog". Science. 1989 Apr 21;244(4902):329-31. |
| JD | Visscher J, van der Woerd R, Bakker CG, Schwartz AW. "Oligomerization of deoxynucleoside-bisphosphate dimers: template and linkage specificity". Orig Life Evol Biosph. 1989;19(1):3-6. |
| JE | Zhan, ZJ and Lynn, DG "Chemical Amplification through template-directed synthesis". J. Am. Chem. Soc. 1997, 119, 12420-1 |
| JF | Bruick RK, Koppitz M, Joyce GF, Orgel LE. "A simple procedure for constructing 5'-amino-terminated oligodeoxynucleotides in aqueous solution Nucleic Acids Res". 1997 Mar 15;25(6):1309-10 |
| JG | Albagli, D; Atta, RVA; Cheng, P; Huan, B and Wood, ML. "Chemical amplification (CHAMP) by a continuous, self-replicating oligonucleotide-based system" J. Am. Chem. Soc. 1999, 121, 6954-6955. Pub. on the web 14 July 1999. |
| JH | Xu, Y and Kool, E "Rapid and Selective selenium-mediated autoligation of DNA strands" J. Am. Chem. Soc. 2000, 122, 9040-1 Pub. on web 08/31/2000. |
| JI | Xu Y, Karalkar NB, Kool ET. "Nonenzymatic autoligation in direct three-color detection of RNA and DNA point mutations". Nat Biotechnol. 2001 Feb;19(2):148-52. |
| JJ | Li X, Zhan ZY, Knipe R, Lynn DG. "DNA-catalyzed polymerization". J Am Chem Soc. 2002 Feb 6;124(5):746-7. |
| JK | Czlapinski, JL and Sheppard, TL. "Nucleic acid template-directed assembly of metallosalen-DNA conjugates". J Am Chem Soc. 2001 Sep 5;123(35):8618-9 published on the web 08/10/2001 |
| JL | Leitzel JC, Lynn DG "Template-directed ligation: from DNA towards different versatile templates". Chem Rec. 2001;1(1):53-62. Published online 30 Jan 2001. |
| JM | Schmidt JG, Nielsen PE, Orgel LE. "Information transfer from peptide nucleic acids to RNA by template-directed syntheses". Nucleic Acids Res. 1997 Dec 1;25(23):4792-4796. |
| JN | DOWER, WJ et al. "In vitro selection as a powerful tool for the applied evolution of proteins and peptides". Current Opinion in Chemical Biology, 2002, 6:390-398. |
| JO | David Liu. "Expanding the reaction scope of DNA-templated synthesis Angew". Chem. Int. Ed. 2002, 41, No. 10 pp. 1796-1800. Published May 15, 2002. |
| JP | Gartner, ZJ et al. "Multistep small-molecule synthesis programmed by DNA templates". J. AM. CHEM. SOC. Vol. 124, No. 35, 2002, 10304-10306. |
| JQ | Calderone, CT et al. "Directing otherwise incompatible reactions in a single solution by using DNA-templated organic synthesis". Angew Chem Int Ed, 2002, 41, No. 21. 4104-4108. |

| | |
|--|------------------------|
| EXAMINER | DATE CONSIDERED |
| EXAMINER: Initial if reference considered. Draw line through citation if not in conformance <u>and</u> not considered. Include copy of this form with next communication to applicant. | |

| | | |
|---|---|------------------------------|
| FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT LIST DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary) | ATTY DOCKET NO: PEDERSEN=9 | SERIAL NO: 10/507,121 |
| | APPLICANT: Henrik PEDERSEN et al | |
| | FILING DATE: March 17, 2005 | CONFIRMATION NO: 8893 |

| | |
|----|--|
| JR | Bittker, JA; Phillips, KJ and Liu, DR "Recent advances in the in vitro evolution of nucleic acids". Curr Opin Chem Biol. 2002 Jun;6(3):367-74. Review. Pub. on the web 20 th March 2002. |
| JS | Gartner, ZJ et al. "Two enabling architectures for DNA-templated organic synthesis ". Angew. Chem Int. Ed. 2003, 42, No. 12, 1370-1375. |
| JT | Rosenbaum, DM et al. "Efficient and sequence-specific DNA-templated polymerization of peptide nucleic acid aldehydes". J. AM. CHEM. SOC. Vol. 125, No. 46, 2003, 13924-13925. |
| JU | Li, X et al. "Stereoselectivity in DNA-templated organic synthesis and its origins". J. AM. CHEM. SOC. Vol. 125, No. 34, 2003, 10188-10189. |
| JV | Gordon, EM et al. "Applications of combinatorial technologies to drug discovery. 2. Combinatorial organic synthesis, library screening strategies, and future directions". Journal of Medicinal Chemistry, Vol. 37, No. 10, May 13, 1994. |
| JW | Otto, S et al. "Recent developments in dynamic combinatorial chemistry". Current opinion in Chemical Biology 2002, 6: 321-327. |
| JX | Pavia, MR. "The Chemical generation of molecular diversity". http://www.netsci.org/Science/Combichem/feature01.html |
| JY | Braun, E, et al. "DNA-templated assembly and electrode attachment of a conducting silver wire". Nature, Vol. 391, 19 February 1998, 775-778. |
| JZ | Tanaka, K et al. "Synthesis of a novel nucleoside for alternative DNA base pairing through metal complexation" J. Org. Chem. 1999, 64, 5002-5003. |
| KA | Berger, M et al. "Universal bases for hybridization, replication and chain termination", Nucleic acids research, Oxford University Press, vol. 28, no. 15, pub. 1 Aug. 2000, p2911-2914. |
| KB | Weizman, H et al. "2,2'-Bipyridine ligand: a novel building block for modifying DNA with intra-duplex metal complexes". J. Am. Chem. Soc. 2001, 123, 3375-3376. |
| KC | Frutos, AG et al. "Demonstration of a word design strategy for DNA computing on surfaces". Nucleic Acids Research, 1997, Vol. 25, No. 23, 4748-4757. |
| KD | Loweth, CJ et al. "DNA-based assembly of gold nanocrystals". Angew. Chem. Int. Ed. 1999, 38, No. 12. 1808-1812. |
| KE | Elghanian, R et al. "Selective colorimetric detection of polynucleotides based on the distance-dependent optical properties of gold nanoparticles". Science, Vol. 277, 22 August 1997,. |
| KF | Storhoff, JJ and Mirkin, CA. "Programmed Materials Synthesis with DNA". Chem Rev. 1999 Jul 14;99(7):1849-1862. |
| KG | Mirkin CA. "Programming the assembly of two- and three-dimensional architectures with DNA and nanoscale inorganic building blocks". Inorg Chem. 2000 May 29;39(11):2258-72. |
| KH | Waybright SM, Singleton CP, Wachter K, Murphy CJ, Bunz UH. "Oligonucleotide-directed assembly of materials: defined oligomers". J Am Chem Soc. 2001 Mar 7;123(9):1828-33. Pub. on web 02/07/2001. |
| KI | Bruce Smith and Markus Krummenacker "DNA-guided assembly of proteins as a pathway to an assembler" (http://www.wadsworth.org/albcon97/abstract/krummena.htm) The 1997 Albany Conference: Biomolecular Motors and Nanomachines |
| KJ | DeWitt, SH et al. "Diversomers": an approach to nonpeptide, nonoligomeric chemical diversity". Proc. Natl. Acad. Sci, USA, Vol. 90, pp. 6909-6913, August 1993. |
| KK | Nielsen, J et al. "Synthetic methods for the implementation of encoded combinatorial chemistry". J. Am. Chem. Soc. 1993, 115, 9812-9813. |
| KL | Ohlmeyer, MHJ et al. "Complex synthetic chemical libraries indexed with molecular tags". Proc. Natl. Acad. Sci, USA, Vol. 90, pp. 10922-10926, Dec. 1993, Chemistry. |
| KM | Zuckermann, RN et al. "Discovery of nanomolar ligands for 7-transmembrane G-protein-coupled receptors from a diverse N-(substituted) glycine peptoid library". J. Med. Chem. 1994, 37, 2678-2685. |

| | |
|---|------------------------|
| EXAMINER | DATE CONSIDERED |
| EXAMINER: Initial if reference considered. Draw line through citation if not in conformance <u>and</u> not considered. Include copy of this form with next communication to applicant. | |

| | | |
|--|---|------------------------------|
| FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT LIST DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary) | ATTY DOCKET NO: PEDERSEN=9 | SERIAL NO: 10/507,121 |
| | APPLICANT: Henrik PEDERSEN et al | |
| | FILING DATE: March 17, 2005 | CONFIRMATION NO: 8893 |

| | |
|----|--|
| KN | Luo, P et al. "Analysis of the structure and stability of a backbone-modified oligonucleotide: implications for avoiding product inhibition in catalytic template-directed synthesis". J. Am. Chem. Soc. 1998, 120, 3019-3031 |
| KO | Luther, A et al. "Surface-promoted replication and exponential amplification of DNA analogues". Nature, Vol. 396, 19 November 1998, 245-248. |
| KP | Klekota, B et al. "Selection of DNA-Binding Compounds via Multistage Molecular Evolution". Tetrahedron 55 (1999) 11687-11697. |
| KQ | Furlan, RLE et al. "Molecular amplification in a dynamic combinatorial library using non-covalent interactions". Chem. Commun., 2000, 1761-1762. |
| KR | Ramström, O et al. "In situ generation and screening of a dynamic combinatorial carbohydrate library against concanavalin A". ChemBioChem, 2000, 1, 41-48. |
| KS | Cousins, GRL et al. "Identification and Isolation of a Receptor for N-Methyl Alkylammonium Salts: Molecular Amplification in a Pseudo-peptide Dynamic Combinatorial Library". Angew. Chem. Int. Ed., 2001, 40, No. 2, 423-427. |
| KT | Roberts, SI et al. "Simultaneous selection, amplification and isolation of a pseudo-peptide receptor by an immobilised N-methyl ammonium ion template". Chem. Commun., 2002, 938-939. |

G:\IPC\G-I\HOIB\PEDERSEN9\PTO 1449.doc

| | |
|---|------------------------|
| EXAMINER | DATE CONSIDERED |
| EXAMINER: Initial if reference considered. Draw line through citation if not in conformance <u>and</u> not considered. Include copy of this form with next communication to applicant. | |

**FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE**
**INFORMATION DISCLOSURE STATEMENT
LIST OF DOCUMENTS CITED BY APPLICANT
(Use several sheets if necessary)**
ATTY DOCKET NO: PEDERSEN=9
SERIAL NO: 10/507,121
APPLICANT: PEDERSEN, et al.
FILING DATE: March 17, 2005
CONFIRMATION NO.: 8893
U.S. PATENT DOCUMENTS (include at least patentee, patent number and issue date)

| EXAMINER INITIAL | | DOCUMENT NUMBER | | | | | | | DATE | PATENTEE | CLASS | SUB- CLASS | FILING DATE IF APPROP. |
|---------------------|----|-----------------|----|----|----|---|---|---|----------------------------------|--------------|-------|---------------|---------------------------|
| | EA | 20 | 05 | 00 | 42 | 6 | 6 | 9 | Published 24 February 2005 | Liu, David R | | | |
| | EB | 20 | 05 | 00 | 25 | 7 | 6 | 6 | Published 3 February 2005 | Liu, David R | | | |

FOREIGN PATENT DOCUMENTS (include at least document number, publication date and country)

| | | DOCUMENT NUMBER | | | | | | | DATE | COUNTRY | CLASS | SUB- CLASS | TRANSLATION YES/NO |
|--|----|-----------------|----|----|---|---|---|---|------------------|---------|-------|---------------|-----------------------|
| | EC | 20 | 04 | 09 | 9 | 4 | 4 | 1 | 18 Nov 2004 | PCT | | | |
| | ED | 03 | 0 | 8 | 2 | 9 | 0 | 1 | 9 Oct 2003 | PCT | | | |
| | EE | 9 | 1 | 0 | 5 | 0 | 5 | 8 | 18 April 1991 | PCT | | | |
| | EF | 20 | 05 | 02 | 6 | 3 | 8 | 7 | 24 March 2005 | PCT | | | |

OTHER DOCUMENTS (include author, title, name of publication, volume, pages & date of publication)

| | | | | | | | | | | | | | |
|--|----|---|--|--|--|--|--|--|--|--|--|--|--|
| | EG | "The Nucleus", January 2004, Vol. LXXXII, No. 5, R. Grubina; "Summer Research Report: R. Grubina on DNA Templated Synthesis for Small Molecule Library", p10-14 | | | | | | | | | | | |
| | EH | Nazarenko et al., "A closed tube format for amplification and detection of DNA based on energy transfer", Nucleic Acids Research, 1997, Vol. 25, No. 12, p2516-2521 | | | | | | | | | | | |
| | EI | Chan et al., "Intra-tRNA distance measurements for nucleocapsid protein-dependent tRNA unwinding during priming of HIV reverse transcription", PNAS Vol. 96, p459-464, January 1999. | | | | | | | | | | | |
| | EJ | DNA-templated synthesis as a basis for the evolution of synthetic molecules. Liu DR, Gartner ZJ, Kanan MW, Calderone CT ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY 225: 612-ORGN, Part 2, MAR 2003 | | | | | | | | | | | |
| | EK | Rodriguez et al., "Template-directed extension of a guanosine 5'-phosphate covalently attached to an oligodeoxycytidylate template", J Mol Evol (1991) 33:477-482 | | | | | | | | | | | |
| | EL | Inoue et al., "Oligomerization of (Guanosine 5'-phosphor)-2-methylimidazolidine on Poly(C)", J. Mol. Biol. (1982), 162, 201-217 | | | | | | | | | | | |
| | EM | C. B. Chen et al., "Template-directed synthesis on Oligodeoxycytidylate and Polydeoxycytidylate templates" J. Mol. Biol. 1985, 181, 271 | | | | | | | | | | | |
| | EN | H. Rembold et al., "Single-strand regions of Poly(G) act as templates for oligo(C) synthesis" J. Mol. Evol. 1994, 38, 205. | | | | | | | | | | | |
| | EO | T. Inoue et al., "A nonenzymatic RNA polymerase model", Science 1983, 219, p859-862 | | | | | | | | | | | |
| | EP | O. L. Acevedo et al., "Non-enzymatic transcription of an oligonucleotide 14 residues long", J. Mol. Biol. 1987, 197, p187-193 | | | | | | | | | | | |
| | EQ | C. Böhler et al., "Template switching between PNA and RNA oligonucleotides", Nature 1995, 376, 578-581 | | | | | | | | | | | |

EXAMINER
DATE CONSIDERED
EXAMINER: Initial if reference considered. Draw line through citation if not in conformance and not considered. Include copy of this form
With next communication to applicant.

| | | | |
|---|----|--|-------------------------------|
| FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT LIST OF DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary) | | ATTY DOCKET NO: PEDERSEN=9 | SERIAL NO: 10/507,121 |
| | | APPLICANT: PEDERSEN, et al. | |
| | | FILING DATE: march 17, 2005 | CONFIRMATION NO.: 8893 |
| OTHER DOCUMENTS (include author, title, name of publication, volume, pages and date of publication) | | | |
| | ER | Acevedo et al., "Template-directed oligonucleotide ligation on hydroxylapatite", Nature vol. 321, 19 June 1986, p790-792 | |
| | ES | Piccirilli, "RNA seeks its maker", Nature vol. 376, 17 August 1995, p548- | |
| | ET | A. W. Schwartz et al., "Template-directed synthesis of novel, nucleic acid-like structures", Science 1985, 228, 585-7 | |
| | EU | Halpin et al.: DNA display III. Solid-phase organic synthesis on unprotected DNA. PLoS Biol. 2004 Jul;2(7):E175. Epub 2004 Jun 22. | |
| | EV | Halpin et al.: DNA display II. Genetic manipulation of combinatorial chemistry libraries for small-molecule evolution. PLoS Biol. 2004 Jul;2(7):E174. Epub 2004 Jun 22. | |
| | EW | Halpin et al.: DNA display I. Sequence-encoded routing of DNA populations. PLoS Biol. 2004 Jul;2(7):E173. Epub 2004 Jun 22 | |
| | EX | "Highly Sensitive In Vitro Selections for DNA-Linked Synthetic Small Molecules with Protein Binding Affinity and Specificity" Doyon, J. B.; Snyder, T. M.; Liu, D. R. J. Am. Chem. Soc. 125, 12372-12373 (2003). | |
| | EY | "Translation of DNA into Synthetic N-Acyloxazolidines" Li, X.; Gartner, Z. J.; Tse, B. N.; Liu, D. R. J. Am. Chem. Soc. 126, 5090-5092 (2004). | |
| | EZ | "DNA-Templated Organic Synthesis: Nature's Strategy for Controlling Chemical Reactivity Applied to Synthetic Molecules" Li, X.; Liu, D. R. Angew. Chem. Int. Ed. 43, 4848-4870 (2004). | |
| | FA | "DNA-Templated Organic Synthesis and Selection of a Library of Macrocycles" Gartner, Z. J.; Tse, B. N.; Grubina, R.; Doyon, J. B.; Snyder, T. M.; Liu, D. R. Science 305, 1601-1605 (2004). | |
| | FB | "Nucleic Acid-Templated Synthesis as a Model System for Ancient Translation" Calderone, C. T. and Liu, D. R. Curr. Opin. Chem. Biol. 8, 645-653 (2004). | |
| | FC | "DNA-Templated Functional Group Transformations Enable Sequence-Programmed Synthesis Using Small-Molecule Reagents" Sakurai, K.; Snyder, T. M.; Liu, D. R. J. Am. Chem. Soc. 127, 1660-1661 (2005). | |
| | FD | "Translating DNA into synthetic Molecules", David R. Liu, PLoS Biology, July 2004, Vol 2, Iss. 7, p905-6. | |
| | FE | "The Development of Amplifiable and Evolvable Unnatural Molecules", David R. Liu, Harvard Univ. Cambridge MA Dept of Chemistry and Chemical Biology, Report dated 4 Aug 2003 No. A104614, approved for public release. | |
| | FF | Website of Prof. David R. Liu, publicly available 11 March 2000 | |
| | FG | Website of Prof. David R. Liu, publicly available 15 Oct 2000 | |
| | FH | Website of Prof. David R. Liu, publicly available 1 March 2001 | |
| | FI | Website of Prof. David R. Liu, publicly available 19 April 2001 | |
| | FJ | Website of Prof. David R. Liu, publicly available 23 Sept 2001 | |
| | FK | Website of Prof. David R. Liu, publicly available 24 Sept. 2002 | |
| | FL | Website of Prof. David R. Liu, publicly available 20 Nov 2002 | |
| | FM | Website of Prof. David R. Liu, publicly available 15 Oct 2003 | |
| EXAMINER | | DATE CONSIDERED | |
| EXAMINER: Initial if reference considered. Draw line through citation if not in conformance <u>and</u> not considered. Include copy of this form With next communication to applicant. | | | |

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO: PEDERSEN=9

SERIAL NO: 10/507,121

INFORMATION DISCLOSURE STATEMENT
LIST OF DOCUMENTS CITED BY APPLICANT
(Use several sheets if necessary)

APPLICANT: PEDERSEN, et al.

FILING DATE: March 17, 2005

CONFIRMATION NO.: 8893

U.S. PATENT DOCUMENTS (include at least patentee, patent number and issue date)

| EXAMINER INITIAL | | DOCUMENT NUMBER | | | | | | | DATE | PATENTEE | CLASS | SUB- CLASS | FILING DATE IF APPROP. |
|---------------------|----|-----------------|----|----|----|---|---|---|------------------|---------------------------|-------|---------------|---------------------------|
| | BA | 6 | 4 | 2 | 9 | 3 | 0 | 0 | Aug 6, 2002 | Kurz, M et al. | | | |
| | BB | 6 | 2 | 0 | 7 | 4 | 4 | 6 | Mar 27, 2001 | Szostak, J et al. | | | |
| | BC | 6 | 1 | 4 | 3 | 5 | 0 | 3 | Nov 7, 2000 | Baskerville, DS et al. | | | |
| | BD | 6 | 6 | 2 | 0 | 5 | 8 | 7 | Sept 16, 2002 | Taussig, MJ et al. | | | May 28, 1998 |
| | BE | 20 | 03 | 00 | 04 | 1 | 2 | 2 | Jan 2, 2003 | Beigelman et al. | | | April 4, 2001 |
| | BF | 5 | 5 | 0 | 3 | 8 | 0 | 5 | Apr 2, 1993 | Sugarman et al. | | | |
| | BG | 5 | 6 | 3 | 9 | 6 | 0 | 3 | Jun 17, 1997 | Dower et al. | | | |
| | BH | 5 | 6 | 6 | 5 | 9 | 7 | 5 | Sep 9, 1997 | Kedar et al. | | | |
| | BI | 5 | 7 | 0 | 8 | 1 | 5 | 3 | Jan 13, 1998 | Dower et al. | | | |
| | BJ | 5 | 7 | 7 | 0 | 3 | 5 | 8 | Jun 23, 1998 | Dower et al. | | | |
| | BK | 5 | 7 | 8 | 9 | 1 | 6 | 2 | Aug 4, 1998 | Dower et al. | | | |
| | BL | 6 | 0 | 5 | 6 | 9 | 2 | 6 | May 2, 2000 | Sugarman et al. | | | July 23, 1996 |
| | BM | 6 | 1 | 4 | 0 | 4 | 9 | 3 | Oct 31, 2000 | Dower et al. | | | Sept 11, 1998 |
| | BN | 6 | 1 | 4 | 3 | 4 | 9 | 7 | Nov 2, 2000 | Dower et al. | | | Mar 6, 1998 |
| | BO | 6 | 1 | 6 | 5 | 7 | 1 | 7 | Dec 26, 2000 | Dower et al. | | | May 13, 1998 |
| | BP | 6 | 1 | 6 | 5 | 7 | 7 | 8 | Dec 26, 2000 | Kedar et al. | | | Jul 2, 1998 |
| | BQ | 6 | 4 | 1 | 6 | 9 | 4 | 9 | July 9, 2002 | Dower et al. | | | Feb 24, 1999 |
| | BR | 4 | 8 | 2 | 2 | 7 | 3 | 1 | April 18, 1989 | Watson et al. | | | |

FOREIGN PATENT DOCUMENTS (include at least document number, publication date and country)

| | | DOCUMENT NUMBER | | | | | | | DATE | COUNTRY | CLASS | SUB- CLASS | TRANSLATION YES/NO |
|--|----|-----------------|----|----|---|---|---|---|---------------|---------|-------|---------------|-----------------------|
| | BS | 9 | 8 | 3 | 1 | 7 | 0 | 0 | 23 July 1998 | PCT | | | |
| | BT | 0 | 0 | 3 | 2 | 8 | 2 | 3 | 8 June 2000 | PCT | | | |
| | BU | 0 | 0 | 4 | 7 | 7 | 7 | 5 | 17 Aug 2000 | PCT | | | |
| | BV | 9 | 0 | 0 | 5 | 7 | 8 | 5 | 31 May 1990 | PCT | | | |
| | BW | 0 | 6 | 0 | 4 | 5 | 5 | 2 | 6 July 1994 | EP | | | |
| | BX | 9 | 5 | 1 | 2 | 6 | 0 | 8 | 11 May 1995 | PCT | | | |
| | BY | 0 | 7 | 7 | 3 | 2 | 2 | 7 | 14 May 1997 | EP | | | |
| | BZ | 0 | 7 | 7 | 6 | 3 | 3 | 0 | 4 June 1997 | EP | | | |
| | CA | 0 | 0 | 2 | 3 | 4 | 5 | 8 | 27 April 2000 | PCT | | | |
| | CB | 20 | 04 | 01 | 6 | 7 | 6 | 7 | 26 Feb 2004 | PCT | | | |
| | CC | 9 | 6 | 1 | 2 | 0 | 1 | 4 | 25 April 1996 | PCT | | | |
| | CD | 20 | 05 | 00 | 3 | 7 | 7 | 8 | 13 Jan 2005 | PCT | | | |

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE**

ATTY DOCKET NO: PEDERSEN=9

SERIAL NO: 10/507,121

**INFORMATION DISCLOSURE STATEMENT
LIST OF DOCUMENTS CITED BY APPLICANT
(Use several sheets if necessary)**

APPLICANT: PEDERSEN, et al.

FILING DATE: March 17, 2005

CONFIRMATION NO.: 8893

OTHER DOCUMENTS (include author, title, name of publication, volume, pages & date of publication)

| | |
|----|--|
| CE | Nemoto, N et al. "In vitro virus: bonding of mRNA bearing puromycin at the 3'-terminal end to the C-terminal end of its encoded protein on the ribosome in vitro". FEBS Lett. 1997 Sep 8;414(2):405-8. |
| CF | Roberts, RW et al. "RNA-peptide fusions for the in vitro selection of peptides and proteins". Proc Natl Acad Sci U S A. 1997 Nov 11;94(23):12297-302. |
| CG | Kurz, M et al. "An efficient synthetic strategy for the preparation of nucleic acid-encoded peptide and protein libraries for in vitro evolution protocols" Fourth International Electronic Conference on Synthetic Organic Chemistry (ECSOC-4), www.mdpi.org/ecsoc-4.htm , September 1-30, 2000 |
| CH | Kurz, M et al. "Psoralen photo-crosslinked mRNA-puromycin conjugates: a novel template for the rapid and facile preparation of mRNA-protein fusions. Nucleic Acids Res. 2000 Sep 15;28(18):E83. |
| CI | Benner, SA. "Expanding the genetic lexicon: incorporating non-standard amino acids into proteins by ribosome-based synthesis". Trends Biotechnol. 1994 May;12(5):158-63 |
| CJ | Mendel, D." Site-directed mutagenesis with an expanded genetic code". Annu. Rev. Biophys. Biomol. Struc. 1995. 24:435-62 |
| CK | Liu DR et al. "Engineering a tRNA and aminoacyl-tRNA synthetase for the site-specific incorporation of unnatural amino acids into proteins in vivo". Proc Natl Acad Sci U S A. 1997 Sep 16;94(19):10092-7. |
| CL | Liu DR et al. "Progress toward the evolution of an organism with an expanded genetic code". Proc Natl Acad Sci USA. 1999 Apr 27;96(9):4780-5 |
| CM | Liu, R et al. "Optimized synthesis of RNA-protein fusions for in vitro protein selection". Methods Enzymol. 2000;318:268-93. |
| CN | Wang, L et al. "A new functional suppressor tRNA/aminoacyl-tRNA synthetase pair for the in vivo incorporation of unnatural amino acids into proteins" J. Am. Chem. Soc. 2000, 122, 5010-5011 Pub 5 April 2000 |
| CO | Ellman J.A., et al. " Biosynthetic method for introducing Unnatural Amino acids site specifically into proteins". Methods Enzymol. 202, 301-336 (1992) |
| CP | DOWER, WJ et al. "In vitro selection as a powerful tool for the applied evolution of proteins and peptides". Current Opinion in Chemical Biology, 2002, 6:390-398. |
| CQ | Gartner, ZJ et al. "Multistep small-molecule synthesis programmed by DNA templates". J. AM. CHEM. SOC. Vol. 124, No. 35, 2002, 10304-10306. |
| CR | Calderone, CT et al. "Directing otherwise incompatible reactions in a single solution by using DNA-templated organic synthesis". Angew Chem Int Ed, 2002, 41, No. 21. 4104-4108. |
| CS | Gartner, ZJ et al. "Two enabling architectures for DNA-templated organic synthesis ". Angew. Chem Int. Ed. 2003, 42, No. 12, 1370-1375. |
| CT | Rosenbaum, DM et al. "Efficient and sequence-specific DNA-templated polymerization of peptide nucleic acid aldehydes". J. AM. CHEM. SOC. Vol. 125, No. 46, 2003, 13924-13925. |
| CU | Li, X et al. "Stereoselectivity in DNA-templated organic synthesis and its origins". J. AM. CHEM. SOC. Vol. 125, No. 34, 2003, 10188-10189. |
| CV | Gordon, EM et al. "Applications of combinatorial technologies to drug discovery. 2. Combinatorial organic synthesis, library screening strategies, and future directions". Journal of Medicinal Chemistry, Vol. 37, No. 10, May 13, 1994. |
| CW | Otto, S et al. "Recent developments in dynamic combinatorial chemistry". Current opinion in Chemical Biology 2002, 6: 321-327. |
| CX | Pavia, MR. "The Chemical generation of molecular diversity". http://www.netsci.org/Science/Combichem/feature01.html |

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE**
ATTY DOCKET NO: PEDERSEN=9
SERIAL NO: 10/507,121
**INFORMATION DISCLOSURE STATEMENT
LIST OF DOCUMENTS CITED BY APPLICANT
(Use several sheets if necessary)**
APPLICANT: PEDERSEN, et al.
FILING DATE: March 17, 2005
CONFIRMATION NO.: 8893

| | | |
|--|----|--|
| | CY | Braun, E, et al. "DNA-templated assembly and electrode attachment of a conducting silver wire". Nature, Vol. 391, 19 February 1998, 775-778. |
| | CZ | Tanaka, K et al. "Synthesis of a novel nucleoside for alternative DNA base pairing through metal complexation" J. Org. Chem. 1999, 64, 5002-5003. |
| | DA | Weizman, H et al. "2,2'-Bipyridine ligandoxide: a novel building block for modifying DNA with intra-duplex metal complexes". J. Am. Chem. Soc. 2001, 123, 3375-3376. |
| | DB | Frutos, AG et al. "Demonstration of a word design strategy for DNA computing on surfaces". Nucleic Acids Research, 1997, Vol. 25, No. 23, 4748-4757. |
| | DC | Loweth, CJ et al. "DNA-based assembly of gold nanocrystals". Angew. Chem. Int. Ed. 1999, 38, No. 12. 1808-1812. |
| | DD | DeWitt, SH et al. "Diversomers": an approach to nonpeptide, nonoligomeric chemical diversity". Proc. Natl. Acad. Sci, USA, Vol. 90, pp. 6909-6913, August 1993. |
| | DE | Nielsen, J et al. "Synthetic methods for the implementation of encoded combinatorial chemistry". J. Am. Chem. Soc. 1993, 115, 9812-9813. |
| | DF | Ohlmeyer, MHJ et al. "Complex synthetic chemical libraries indexed with molecular tags". Proc. Natl. Acad. Sci, USA, Vol. 90, pp. 10922-10926, Dec. 1993, Chemistry. |
| | DG | Zuckermann, RN et al. "Discovery of nanomolar ligands for 7-transmembrane G-protein-coupled receptors from a diverse N-(substituted) glycine peptoid library". J. Med. Chem. 1994, 37, 2678-2685. |
| | DH | Luo, P et al. "Analysis of the structure and stability of a backbone-modified oligonucleotide: implications for avoiding product inhibition in catalytic template-directed synthesis". J. Am. Chem. Soc. 1998, 120, 3019-3031 |
| | DI | Luther, A et al. "Surface-promoted replication and exponential amplification of DNA analogues". Nature, Vol. 396, 19 November 1998, 245-248. |
| | DJ | Klekota, B et al. "Selection of DNA-Binding Compounds via Multistage Molecular Evolution". Tetrahedron 55 (1999) 11687-11697. |
| | DK | Furlan, RLE et al. "Molecular amplification in a dynamic combinatorial library using non-covalent interactions". Chem. Commun., 2000, 1761-1762. |
| | DL | Ramström, O et al. "In situ generation and screening of a dynamic combinatorial carbohydrate library against concanavalin A". ChemBioChem, 2000, 1, 41-48. |
| | DM | Cousins, GRL et al. "Identification and Isolation of a Receptor for N-Methyl Alkylammonium Salts: Molecular Amplification in a Pseudo-peptide Dynamic Combinatorial Library". Angew. Chem. Int. Ed., 2001, 40, No. 2, 423-427. |
| | DN | Roberts, SI et al. "Simultaneous selection, amplification and isolation of a pseudo-peptide receptor by an immobilised N-methyl ammonium ion template". Chem. Commun., 2002, 938-939. |
| | DO | Elghanian, R et al. "Selective colorimetric detection of polynucleotides based on the distance-dependent optical properties of gold nanoparticles". Science, Vol. 277, 22 August 1997,. |
| | | |
| | | |
| | | |

EXAMINER
DATE CONSIDERED
EXAMINER: Initial if reference considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(use as many sheets as necessary)

Sheet 1

1

C

2

Complete if Known

Application Number

10/507,121

Filing Date

March 17, 2005

First Named Inventor

Henrik PEDERSEN

Group Art Unit

Examiner Name

Attorney Docket Number

PEDERSEN=9

[illegible][illegible]

Examiner
Signature

Date
Considered

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number

10/507,121

Filing Date

March 17, 2005

First Named Inventor

Henrik PEDERSEN

Group Art Unit

Examiner Name _____

Attorney Docket Number

PEDERSEN=9

| | |
|-------|---|
| Sheet | 2 |
|-------|---|

| | |
|----|---|
| of | 2 |
|----|---|

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

[illegible]

Examiner
Signature

Date
Considered

* **EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

INFORMATION DISCLOSURE STATEMENT
Patent Application in United States 10/507,121
Attorney Docket: PEDERSEN=9
Confirmation No.: 8893

| Examiner's Initials | NO. | AUTHOR | TITLE | JOURNAL NAME, VOLUME NUMBER, PAGE NUMBER PUBLICATION DATE |
|---------------------|-----|--|---|--|
| | 1 | Walder JA, Walder RY, Heller MJ, Freier SM, Letsinger RL, Klotz IM. | Complementary carrier peptide synthesis: general strategy and implications for prebiotic origin of peptide synthesis. | Proc Natl Acad Sci U S A. Jan., 1979; 76(1):51-5. |
| | 2 | Tamura K, Schimmel P. | Oligonucleotide-directed peptide synthesis in a ribosome- and ribozyme-free system. | Proc Natl Acad Sci U S A. Feb. 13, 2001;98(4):1393-7. |
| | 3 | Lewis RJ, Hanawalt PC. | Ligation of oligonucleotides by pyrimidine dimers -a missing 'link' in the origin of life? | Nature. Jul. 22, 1982; 298(5872):393-6. |
| | 4 | Royer, GP; Cruickshank, KA; Morrison, LE. | Template-directed photoligation | EP 0324616 B1 Filed: 12. January 1989 Priority: 13 January 1988 Publication date: 19 July 1989 |
| | 5 | Liu J, Taylor JS. | Template-directed photoligation of oligodeoxyribonucleotides via 4-thiothymidine. | Nucleic Acids Res. July 1, 1998; 26(13):3300-4 |
| | 6 | Fujimoto et al. | Template-directed photoreversible ligation of deoxyoligonucleotides via 5-Vinyldeoxyuridine | J. Am. Chem. Soc. 2000, 122, 5646-5647 |
| | 7 | Kenzo Fujimoto, Shigeo Matsuda, Naoki Ogawa, Masayuki Hayashi & Isao Saito | Template-directed reversible photocircularization of DNA via 5-vinyldeoxycytidine | TETRAHEDRON LETTERS 2000 , 41:33:6451-6454 |
| | 8 | Kenzo Fujimoto, Naoki Ogawa, Masayuki Hayashi, Shigeo Matsuda & Isao Saito | Template directed photochemical synthesis of branched oligodeoxynucleotides via 5-carboxyvinyldeoxyuridine | Tetrahedron letters 2000, 41:49:9437-40 |

INFORMATION DISCLOSURE STATEMENT
Patent Application in United States 10/507,121
Attorney Docket: PEDERSEN=9
Confirmation No.: 8893

| Examiner's Initials | NO. | AUTHOR | TITLE | JOURNAL NAME, VOLUME NUMBER, PAGE NUMBER PUBLICATION DATE |
|---------------------|-----|--|--|--|
| | 9 | Saito, I; Fujimoto, K; Matsuda, O | Reversible photocoupling nucleic acid and phosphoroamidite | US 6593088 July 15, 2003 |
| | 10 | Gryaznov, SM | Auto-ligating oligonucleotide compounds | US5571903 November 5, 1996 |
| | 11 | Gryaznov et al. | Chemical Ligation of oligonucleotides in the presence and absence of a template | J. Amer. Chem. Soc. 1993, 115, 3808-9 |
| | 12 | Gryaznov SM, Letsinger RL. | Template controlled coupling and recombination of oligonucleotide blocks containing thiophosphoryl groups. | Nucleic Acids Res. March 25, 1993; 21(6):1403-8 |
| | 13 | Gryaznov SM, Schultz R, Chaturvedi SK, Letsinger RL. | Enhancement of selectivity in recognition of nucleic acids via chemical autoligation. | Nucleic Acids Res. June 25, 1994; 22(12):2366-9. |
| | 14 | Herrlein MK, Letsinger RL. | Selective chemical autoligation on a double-stranded DNA template | Nucleic Acids Res. Nov. 25, 1994; 22(23):5076-8 |
| | 15 | Letsinger, RL; Wu, T; Elghanian, R | Chemical and photochemical ligation of oligonucleotide blocks | Nucleosides and nucleotides, 16(5&6), 643-652 (1997) |
| | 16 | Letsinger, RL: Gryaznov, SM | Non-enzymatic ligation of oligonucleotides | US 5476930 December 19, 1995 |
| | 17 | Letsinger, RL; Gryaznov, SM | Method for covalently linking adjacent oligonucleotides | US 5,681, 943 October 28, 1997 |
| | 18 | Letsinger, RL; Gryaznov, SM | Chemical ligation of template-directed | EP0830363A1/WO 96/35699 |

INFORMATION DISCLOSURE STATEMENT
Patent Application in United States 10/507,121
Attorney Docket: PEDERSEN=9
Confirmation No.: 8893

| Examiner's Initials | NO. | AUTHOR | TITLE | JOURNAL NAME, VOLUME NUMBER, PAGE NUMBER PUBLICATION DATE |
|---------------------|-----|--|---|--|
| | | | oligonucleotides | Published: 14 November 1996 Filed: 3 May 1996 Priority date: 8 May 1995 |
| | 19 | Letsinger, RL; Gryaznov, SM | Method of forming oligonucleotides | EP 0695305 Published 27 October 1994 Priority: 12 April 1993 Filed 6 April 1994 |
| | 20 | Letsinger, RL; Herrlein, MK | Covalent lock for self-assembled oligonucleotide constructs | US5780613 July 14, 1998 |
| | 21 | Gryaznov, SM; Lloyd, DH | Oligonucleotide clamps | US5741643 April 21, 1998 |
| | 22 | Gryaznov, SM | Convergent synthesis of branched and multiply connected macromolecular structures | US5830658 November 3, 1998 |
| | 23 | Visscher J, Bakker CG, van der Woerd R, Schwartz AW | Template-directed oligomerization catalyzed by a polynucleotide analog. | Science. April 21, 1989; 244(4902):329-31. |
| | 24 | Visscher J, van der Woerd R, Bakker CG, Schwartz AW. | Oligomerization of deoxynucleoside-bisphosphate dimers: template and linkage specificity. | Orig Life Evol Biosph. 1989;19(1):3-6. |
| | 25 | Zhan, ZJ and Lynn, DG | Chemical Amplification through template-directed synthesis | J. Am. Chem. Soc. 1997, 119, 12420-1 |
| | 26 | Segev, D | Nucleic acid detection and amplification by chemical linkage of oligonucleotides | US5843650 December 1, 1998 |
| | 27 | Bruick RK, Koppitz M, Joyce GF, | A simple procedure for constructing 5'-amino- | Nucleic Acids Res. March 15, |

INFORMATION DISCLOSURE STATEMENT
Patent Application in United States 10/507,121
Attorney Docket: PEDERSEN=9
Confirmation No.: 8893

| Examiner's Initials | NO. | AUTHOR | TITLE | JOURNAL NAME, VOLUME NUMBER, PAGE NUMBER PUBLICATION DATE |
|------------------------|-----|---|---|---|
| | | Orgel LE. | terminated oligodeoxynucleotides in aqueous solution | 1997;25(6):1309-10 |
| | 28 | Albagli, D; Atta, RVA; Cheng, P; Huan, B and Wood, ML. | Chemical amplification (CHAMP) by a continuous, self-replicating oligonucleotide-based system | J. Am. Chem. Soc. 1999, 121, 6954-6955. Pub. on the web 14 July 1999. |
| | 29 | Xu, Y and Kool, E | Rapid and Selective selenium-mediated autoligation of DNA strands | J. Am. Chem. Soc. 2000, 122, 9040-1 Pub. on web 08/31/2000. |
| | 30 | Xu Y, Karalkar NB, Kool ET. | Nonenzymatic autoligation in direct three-color detection of RNA and DNA point mutations. | Nat Biotechnol. Feb. 2001; 19(2):148-52. |
| | 31 | Li X; Zhan ZY, Knipe R, Lynn DG. | DNA-catalyzed polymerization. | J Am Chem Soc. Feb. 6, 2002; 124(5):746-7. |
| | 32 | Czlapinski, JL and Sheppard, TL. | Nucleic acid template-directed assembly of metallosalen-DNA conjugates. | J Am Chem Soc. Sep. 5, 2001; 123(35):8618-9 published on the web 08/10/2001 |
| | 33 | Leitzel JC, Lynn DG | Template-directed ligation: from DNA towards different versatile templates. | Chem Rec. 2001;1(1):53-62. Published online 30 Jan 2001. |
| | 34 | Schmidt JG, Nielsen PE, Orgel LE. | Information transfer from peptide nucleic acids to RNA by template-directed syntheses. | Nucleic Acids Res. Dec. 1, 1997; 25(23):4797-4802. |
| | 35 | Lerner, R; Janda, K; Brenner, S; Nielsen, J | Encoded combinatorial chemical libraries | EP 0 643 778 Published: 14. October 1993 Filing date: 30 March 1993 Priority date: 30 March 1992 |

INFORMATION DISCLOSURE STATEMENT
Patent Application in United States 10/507,121
Attorney Docket: PEDERSEN=9
Confirmation No.: 8893

| Examiner's Initials | NO. | AUTHOR | TITLE | JOURNAL NAME, VOLUME NUMBER, PAGE NUMBER PUBLICATION DATE |
|---------------------|-----|--|--|---|
| | 36 | Lerner, RL, Janda, K, Brenner, S | Encoded Combinatorial Chemical libraries | US 5,573,905 November 12, 1996 |
| | 37 | Lerner, RL, Janda, K, Brenner, S | Encoded combinatorial chemical libraries | US 5,723,598 March 3, 1998 |
| | 38 | Lerner, R; Janda, K; Brenner, S | Encoded combinatorial chemical libraries | US6,060,596 May 9, 2000 |
| | 39 | Gartner, Z; Liu, DR | The generality of DNA-templated synthesis as a basis for evolving non-natural small molecules. | J Am Chem Soc. Jul. 18, 2001; 123(28):6961-3. |
| | 40 | Gartner, et al. | Expanding the reaction scope of DNA-templated synthesis | Angew. Chem. Int. Ed. 2002, 41, No. 10 pp. 1796-1800. Published May 15, 2002. |
| | 41 | Bittker, JA; Phillips, KJ and Liu, DR | Recent advances in the in vitro evolution of nucleic acids. | Curr Opin Chem Biol. Jun. 2002; 6(3):367-74. Review. Pub. on the web 20 th March 2002. |
| | 42 | Summerer, D and Marx, A | DNA-templated synthesis: more versatile than expected. | Angew Chem Int Ed Engl. Jan. 4, 2002; 41(1):89-90. Review. |
| | 43 | Storhoff, JJ and Mirkin, CA. | Programmed Materials Synthesis with DNA. | Chem Rev. July 14, 1999; 99(7):1849-1862. |
| | 44 | Mirkin CA. | Programming the assembly of two- and three-dimensional architectures with DNA and nanoscale inorganic building blocks. | Inorg Chem. May 29, 2000; 39(11):2258-72. |
| | 45 | Waybright SM, Singleton CP, Wachter K, Murphy CJ, Bunz UH. | Oligonucleotide-directed assembly of materials: defined oligomers. | J Am Chem Soc. Mar. 7, 2001; 123(9):1828-33. Pub. on web 02/07/2001. |
| | 46 | Bruce Smith and Markus Krummenacker | DNA-guided assembly of proteins as a pathway to an assembler | (http://www.wadsworth.org/albco_n97/abstract/krummena.htm) The 1997 Albany Conference: Biomolecular Motors and Nanomachines |

INFORMATION DISCLOSURE STATEMENT
Patent Application in United States 10/507,121
Attorney Docket: PEDERSEN=9
Confirmation No.: 8893

| Examiner's Initials | NO. | AUTHOR | TITLE | JOURNAL NAME, VOLUME NUMBER, PAGE NUMBER PUBLICATION DATE |
|---------------------|-----|-----------------------|--|---|
| | 47 | Mirkin et al. | Nanoparticles having oligonucleotide attached thereto and uses therefor | WO 01/00876 Filed: 26 June 2000 Publication date: 4 January 2001 |
| | 48 | Payan, D and Nolan, G | Combinatorial enzymatic complexes | WO 98/56904 Filed: 10 June 1998 Publication date: 17 December 1998 |
| | 49 | Berger, M et al. | Universal bases for hybridization, replication and chain termination | Nucleic acids research, Oxford University Press, vol. 28, no. 15, pub. 1 Aug. 2000, p2911-2914. |
| | 50 | Keller, KC et al. | Role of peptide tagging system in degradation of proteins synthesized from damaged messenger RNA | Science, vol. 271, 16 Feb. 1996, p 990-993 |
| | 51 | Salas, J et al. | Biosynthetic polydeoxynucleotides as direct templates for polypeptide synthesis | Journal of Biological Chemistry, vol. 243, no 6, 1968, p 1012-1015 |
| | 52 | Gold, L et al. | Systematic polypeptide evolution by reverse translation | WO 93/03172 Published: 18 feb 1993 |
| | 53 | Pschorr, J | Genotyp und Phanotyp koppelnde Verbindung | DE 196 46 372 Published: 19 June 1997 |

G:\ipcin-q\Nuev\Pedersen2A\pto ids list.doc